

REMARKS

The amendment to the specification at page 3 corrects an obvious typographical error, without adding new matter to the application. For instance, the originally mentioned Fig. 3c does not exist in this application, but Fig. 2c does exist.

Claims 1-5 and 20 are pending in this application. Other claims have been withdrawn.

Claims 1-5 and 20 stand rejected under 35 USC 102 over US Patent 6,563,993 to Imamura et al. (hereinafter, "Imamura"). For the following reasons, the presently amended claims patentably distinguish over Imamura.

In brief overview, the office action cites Fig. 1 of Imamura to support the foregoing rejection. Claim 1 has been amended to more clearly distinguish over Fig. 1 of Imamura. Second, upon further analysis of Imamura, Applicants refer to Comparative Example 1 (Cols. 12-13) and have amended Claim 1 to further distinguish over that example. Third, Applicants refer to Item 1 of the Admissions of Prior Art under 37 CFR § 1.56 dated June 4, 2004, and have amended Claim 1 to further distinguish over such prior art.

On November 20, 2006, the examiner held a personal interview including the undersigned attorney. Applicants acknowledge the examiner's courtesy in granting the interview, concur in the examiner's Interview Summary, and add the following comments.

1. Distinction over Imamura Fig. 1

It was agreed at the interview that the following amendment to Claim 1 patentably distinguishes over the Fig. 1 of Imamura: "[T]he light-scattering material being discrete from any cladding material and discrete from any cladding material on the core."

Imamura shows in the following reproduction of Fig. 1 a light diffusive and reflective film (1) in the light fiber of Fig. 1 (or Fig. 2), a cladding layer (2) and a light fiber core 2. A careful consideration of the entirety of the disclosure of Imamura shows the light diffusive and reflective film (1) constitutes part of the cladding (2). This is shown in Imamura's examples, whereby, for instance, Example 1 teaches that, "*[t]he clad was found to be provided with a light diffusive and reflective film formed along the longitudinal direction of the clad*" (emphasis added); Examples 2-12 each teach that, "a light diffusive and reflective film was formed in the clad * * *"; and Example 13 similarly teaches that, "a light diffusive and reflective was formed * * * from in the clad."

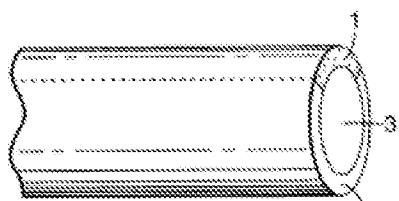


Fig. 1

Accordingly, the language from Claim 1 quoted at the beginning of this section patentably distinguishes over Fig. 1 (and Fig. 2) of Imamura. Applicants further believe that the presently crossed-out language in Claim 1 (c) also patentably distinguishes over Fig. 1 (and Fig. 2) of Imamura, but agrees that the Claim 1 language quoted above distinguishes with greater clarity over the prior art.

2. Distinction over Imamura Comparative Example 1

Applicants believe that the agreement reached at the interview on distinguishing Claim 1 over the Comparative Example 1 of Imamura applies to the following language from that claim: "the light pipe with directional side-light extraction excluding * * * an adhesive layer over the majority of an interface between the strip and the core."

In more detail, Imamura teaches a Comparative Example 1 at Columns 10-11, in which 20 mm wide strips of a light diffusive and reflective film was provided with an adhesive layer on one of its main surfaces. Col. 10, line 59 – Col. 11, line 10. A so-formed strip was then adhered by the adhesive layer onto the core of a light fiber, over which a heat-shrinkable cladding was applied. Col. 11, lines 11-21.

As a result of the language from Claim 1 quoted above at the beginning of this section, the claimed "single strip" of material would be incorporated into the claimed light pipe by different means than in Imamura's Comparative Example 1; that is, without using an adhesive layer over a majority of a main surface of a strip of material. For instance, the claimed single strip of material could be formed by co-extrusion processes such as shown in present Figures 15 and 16. Figure 15 shows a strip 88 interposed between a core 87 and a cladding 84; and Figure 16 similarly shows a strip 96 interposed between a core 98 and a cladding 100. The strips of Figures 15 and 16 are incorporated into a light pipe without use of an adhesive layer over a majority of a main surface of the strips.

Accordingly, Claim 1 should be held to patentably distinguish over the mentioned Comparative Example 1 of Imamura.

3. Distinction over admitted prior art—and clarification of prior art

Claim 1 has been also amended to further distinguish over the Admissions of Prior Art under 37 CFR § 1.56 dated June 4, 2004. In particular, Item 1 of those admissions refers to "an acrylic rod with a constant-width paint stripe composed of Papermate-brand 'White Out' correction fluid, which includes titanium dioxide particles." Applicants clarify that the proper name for the correction fluid is "Papermate-brand 'Liquid Paper,'" and that "White Out" was inadvertently mentioned instead in the admissions of prior art. A Material Safety Data Sheet for Papermate-brand Liquid Paper accompanies these remarks, and describes, *inter alia*, the composition of that product.

The office action at page 2 mentions in the first paragraph that the examiner interprets Claim 1 to cover "a device that has no fluoropolymer [sic] cladding." This comment apparently would apply to the acrylic rod shown in the admissions of prior art. However, Claim 1 has been amended to recite, "the light pipe with directional side-light extraction excluding *** the specific combination, as stated hereafter, of a cladless acrylic-core light pipe with a constant-width strip of organic-solvent based paint containing light-scattering particles." Based on discussion with the examiner at the mentioned interview, it is believed that the foregoing recitation patentably distinguishes over the admitted prior art.

Conclusion and dependent claims

In view of the foregoing distinctions (1) – (3), Claim 1 and its dependent Claims 2-5 and 20 should be held allowable. Moreover, the foregoing dependent claims define further features of Applicants' invention so as to more forcefully distinguish over the prior art than base Claim 1.

Consideration of generic claim under 37 CFR § 1.141 (a)

In addition to consideration of elected Species A and B, and Subspecies E, Applicants request consideration of claims to all subspecies reading on such "single strip" of material. This is in view of the allowability of Claim 1 reciting a "single strip" of light-extraction material. See 37 CFR § 1.141 (a). The relevant subspecies includes Subspecies F, G and H.

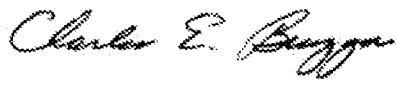
As to Subspecies B, the examiner apparently accepted Applicants' clarification in their Amendment dated May 26, 2006, that "Species A and B should be consolidated." P. 10. Thus, the office action allows the previous amendment to Claim 1, which the office action states, "includes limitations found in species B" (p. 1, 1st para.).

I certify that the foregoing document and any document(s) referenced below are being filed electronically with the USPTO using the private PAIR system on the date stated below.

Application No. 10/796,830
Date: December 11, 2006
Reply to Office Action of 08/11/06

Dated: December 11, 2006

Respectfully submitted,



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Enclosure: Material Safety Data Sheet for Papermate-brand Liquid Paper

Material Safety Data Sheet

MSDS#: 1391

Page 1 of 2

Sanford Corporation
2711 Washington Boulevard
Bellwood, IL 60104

Telephone Number: 1-800-323-0749
Initiated By: Susan Nyborg
Date of Last Revision: June 1, 2001
Medical Emergency No: 1-800-228-5635

Section One: Product Identification

Product Name: Liquid Paper Correction Fluid
Colors: Ledger Buff, Ledger Green, Canary Yellow, Pink, Blue, Green, Ivory
Includes: Liquid Paper Colors Correction Fluid, (LPCF-17), Liquid Paper Colored Correction Fluid
All components of this product comply with the U.S. Toxic Substances Control Act (TSCA).

Section Two: Composition

Methylcyclohexane (108-87-2), titanium dioxide (13463-67-7), mineral spirits (64742-48-9), resins, dispersant, colorants, mustard oil (57-06-7), masking fragrance

Section Three: Physical and Chemical Characteristics

For product unless otherwise indicated:

Boiling Point: 212°F
Vapor Pressure (mm Hg): 83 mm Hg at 100°F
Specific Gravity: ~1.3
Solubility in Water: Negligible
Appearance and Odor: White fluid; solvent odor
Evaporation Rate: >1 (butyl acetate = 1)

Section Four: Fire and Explosion Hazard Data

Flash Point (Method Used): 25°F (Closed Cup)
Flammability Limits (% by volume): Lower: 1.2% Upper: 6.7%
Extinguishing Medium: Carbon dioxide, foam, dry chemical
Special Fire Fighting Procedures: In fires involving large quantities, use self-contained breathing apparatus.
Cool fire-exposed containers with water spray/fog.
Unusual Fire and Explosion Hazards: Product is flammable. May produce hazardous decomposition products.

Section Five: Reactivity Data

Stability:	Stable
Conditions to Avoid:	Avoid contact with open flames or other ignition sources.
Chemical Incompatibility:	Strong oxidizers
Bazardous Decomposition:	May produce oxides of carbon, nitrogen, and various hydrocarbons in fire.
Hazardous Polymerization:	Will not occur.

Section Six: Health Hazard Data

Chemicals Listed as Carcinogens or Potential Carcinogen:

IARC Monographs:	No
National Toxicology Program:	No
OSHA Regulated:	No

Routes of entry: Inhalation - None under normal use conditions. Eyes - Irritation may occur. Wash through with water. Skin - Wash with soap and water. Ingestion - Contact a physician.

NOTES: If vapors are deliberately inhaled, the following symptoms may occur: respiratory irritation, dizziness, drowsiness, headache, nausea, unconsciousness, convulsions, cardiac sensitization, coma, and death. Mustard oil added to deter abuse. If ingested, depending on amount, most of the symptoms described above may occur. Aspiration may cause chemical pneumonitis. ORM-D Consumer Commodity

Section Seven: Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spill:	Wipe up with absorbent materials.
Waste Disposal Method:	Discard in accordance with Federal, State, and Local Regulations.
Precautions to Be Taken in Handling and Storage:	In large quantities, store in a well-ventilated area.
Other Precautions:	Product is flammable.

Section Eight: Personal Protection and Exposure Control Measures

Eye Protection:	None under normal use conditions.
Skin Protection:	None under normal use conditions.
Respiratory Protection:	None under normal use conditions.
Ventilation:	None under normal use conditions.
Protective Clothing:	None under normal use conditions.

HMIS Code	
Health	2
Flammability	3
Reactivity	0
Personal Protection	N/A

Sanford Corporation has been advised by council that the OSHA Hazard Communication Standard does not apply to the Sanford product described in this MSDS. The reason for the exemption is contained in 29 CFR 1910.1200 (b)(6)(ix), as amended July 1, 1994, per the Code of Federal Regulations. The information contained in this MSDS is forwarded to you for your information, but is not meant to imply that the product is covered by the Hazard Communication Standard, nor is the MSDS meant to comply with all the requirements of the Hazard Communication Standard.